



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,768	01/10/2001	Gary Lomp	I-2-91.6US	8696

24374 7590 07/12/2004  
VOLPE AND KOENIG, P.C.  
DEPT. ICC  
UNITED PLAZA, SUITE 1600  
30 SOUTH 17TH STREET  
PHILADELPHIA, PA 19103

EXAMINER

NGUYEN, BRIAN D

ART UNIT	PAPER NUMBER
----------	--------------

2661

DATE MAILED: 07/12/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/757,768

Applicant(s)

LOMP ET AL.

Examiner

Brian D Nguyen

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on the application filed 1/10/01.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-19, 22-26, 29-33, 36-40, 43-47, 50-54 and 56 is/are rejected.
- 7) ☒ Claim(s) 20, 21, 27, 28, 34, 35, 48, 49 and 55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4 & 6-14.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 16, 18-19, 23-28, 30-33, 44-47, 51-52, and 55-56 are objected to because of the following informalities:

Claim 16, line 3, it is suggested to change "a quadrature-phase angle" to ---a quadrature-phase (Q) angle---.

Claims 18-19 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 16-17. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 23 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 22 because the limitations in claim 23 is the same as the limitations in line 6-7 of claim 22.

Claim 30, line 3, it is suggested to change "a quadrature-phase angle" to ---a quadrature-phase (Q) angle---.

Claims 32-33 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 30-31. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 44, line 3, it is suggested to change "a quadrature-phase angle" to ---a quadrature-phase (Q) angle---.

Art Unit: 2661

Claims 46-47 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 44-45. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 51 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 50 because the limitations in claim 51 is the same as the limitations in line 6-7 of claim 50.

Claim 52, line 1, it is suggested to insert ---circuit--- after "said acquisition".

Claim 55, line 2, it is suggested to change "ling codes" to ---long codes---.

Claim 56, line 1, it is suggested to insert ---circuit--- after "said acquisition".

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 36-42, 54 and 56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 36-42 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete because there are no steps in the claims.

Claim 40 recites the limitation "the first long code" and "the second long code" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2661

Claim 42 recites the limitation "the first phase angle" and "the second phase angle" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

Claim 54 recites the limitation "the first long code" and "the second long code" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 56 recites the limitation "the first phase angle" and "the second phase angle" in line 4. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-19, 22-26, 29-33, 36-40, 43-47, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (5,619,526) in view of Witter (5,627,835).

Regarding claim 15, Kim discloses a CDMA system comprising generating a first and second long codes; transmitting the long codes at a first and second phase angles; and acquiring the first and second long codes (see col. 2, line 38-col. 3, line 8). Kim does not explicitly disclose searching  $N/2$  chips. However, searching  $N/2$  chips is a matter of choice. Witter discloses a range of the search window size (see col. 1, lines 29-35; col. 4, lines 28-60). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a search window size, such as  $N/2$ , as taught by Witter in the system of Kim in order to meet specific needs.

Art Unit: 2661

Regarding claims 16-19, Kim further discloses in-phase and quadrature phase angles (see I and Q channel in figure 3).

Regarding claims 22-26 and 36-40, claims 22-26 and 36-40 are method claims that have substantially all the limitation of respective method claims 15-19 with in-phase and quadrature phase is replaced by M-ary phase. Therefore, they are subject to the same rejection.

Regarding claims 29-33, claims 29-33 are system claims that have substantially all the limitation of respective method claims 15-19. Therefore, they are subject to the same rejection.

Regarding claims 43-47, claims 43-47 are system claims that have substantially all the limitation of respective method claims 15-19. Therefore, they are subject to the same rejection.

Regarding claims 50-54, claims 50-54 are system claims that have substantially all the limitation of respective method claims 15-19 with in-phase and quadrature phase is replaced by M-ary phase. Therefore, they are subject to the same rejection.

#### *Allowable Subject Matter*

6. Claims 20-21, 27-28, 34-35, 48-49, and 55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 41-42 and 56 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

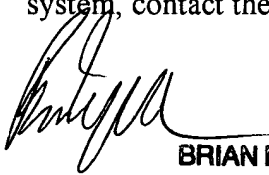
Art Unit: 2661

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (703) 305-5133.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**BRIAN NGUYEN**  
6/26/04 **PRIMARY EXAMINER**